

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims.

1. (Currently Amended) A method Method for enabling quasi peer-to-peer data connectivity in cellular communication networks, comprising:

receiving data from one mobile terminal ~~which is~~ selected out of a set of mobile terminals participating in a quasi peer-to-peer data communication over a cellular communication network;

causing, at least in part, a retrieving of information about destination mobile terminals, wherein said destination mobile terminals are mobile terminals of said set of mobile terminals with the exception of said selected mobile terminal; and
causing, at least in part, a transmission of transmitting said received data to said destination mobile terminals in accordance with said information about said destination mobile terminals.

2. (Currently Amended) A method Method according to claim 1, wherein said quasi peer-to-peer data communication is associated with a relay session for handling facilitating a processing of data communication between mobile terminals of said set of mobile terminals, wherein said relay session ~~needs to be is~~ established by an initiating mobile terminal.

3. (Currently Amended) A method Method according to claim 2, wherein said establishing of said relay session comprises:

receiving a request for initiating said relay session from said initiating mobile terminal;

wherein said request for initiation at least comprises an instruction to establish a new relay session forming said relay session;

wherein said initiating mobile terminal becomes one mobile terminal out of said set of mobile terminals; and

causing, at least in part, a transmission of transmitting a response to said initiating terminal, wherein said response comprises at least a session identifier associated with said relay session.

4. (Currently Amended) A method Method according to claim 2, wherein each of said mobile terminals of said set of mobile terminals with the exception of said initiating terminal are joining to said relay session to participate in said quasi peer-to-peer communication.

5. (Currently Amended) A method Method according to claim 4, wherein said joining to said relay session comprises:

receiving a request for signing-up in said relay session from a signing-up mobile terminal, wherein said request for signing-up comprises at least said session identifier; and
causing, at least in part, a joining of said signing-up mobile terminal to said relay session identified by said session identifier such that said signing-up mobile terminal becomes one mobile terminal out of said set of mobile terminals.

6. (Currently Amended) A method Method according to claim 1, wherein said mobile terminals of said set of mobile terminals authenticate before participating in said quasi peer-to-peer communication.

7. (Currently Amended) A method Method according to claim 1, wherein said mobile terminals of said set of mobile terminals communicate over data packet switched services for communicating said data.

8. (Currently Amended) A method Method according to claim 1, wherein said mobile terminals of said set of mobile terminals communicate via a protocol out of group of protocols comprising at least transmission control protocol (TCP) and user datagram protocol (UDP).

9. (Currently Amended) A method Method for allowing a mobile terminal for quasi peer-to-peer connectivity with at least one other mobile terminal; comprising:

causing, at least in part, a transmission of transmitting data from at least one mobile terminal to be communicated to said at least one other mobile terminal for quasi peer-to-peer connectivity in a cellular communication network by transmitting said data to a relay entity; and

receiving data originating from said at least one other mobile terminal by receiving said data from said relay entity.

10. (Currently Amended) A method Method according to claim 9, further comprising: establishing a relay session on said relay entity by transmitting an indication thereto; wherein said relay session is associated with said quasi peer-to-peer data communication and handles facilitates a processing of data communication between said mobile terminal and said at least one other mobile terminal.

11. (Currently Amended) A method Method according to claim 10, wherein said establishing comprises:

causing, at least in part, a transmission of transmitting a request for initiation of said relay session to said relay entity, wherein said request for initiation comprises at least an instruction to establish a new relay session forming said relay session; wherein said mobile terminal becomes participant in said quasi peer-to-peer data communication; and receiving a response from said relay entity, wherein said response comprises at least a session identifier associated with said relay session.

12. (Currently Amended) A method Method according to claim 9, further comprising: joining to said relay session on an indication transmitted to said relay entity.

13. (Currently Amended) A method Method according to claim 12, wherein said joining comprises:

causing, at least in part, a transmission of transmitting a request for signing-up to said relay session, wherein said request for signing-up comprises at least said session identifier; wherein said mobile terminal becomes a participant in said quasi peer-to-peer data communication.

14. (Currently Amended) A method Method according to claim 9, further comprising: causing, at least in part, an inviting of said at least one other mobile terminal to participate in said quasi peer-to-peer data communication by transmitting a request for invitation to said at least one other mobile terminal such that said at least one other mobile terminal is

enabled to join to said relay session, wherein said request for invitation comprises at least said session identifier that is associated with said relay session.

15. (Currently Amended) A method Method according to claim 9, further comprising:
receiving a request for invitation from said at least one other mobile terminal such that said mobile terminal is enabled to join to said relay session, wherein said request for invitation comprises at least said session identifier that is associated with said relay session.

16. (Currently Amended) A method Method according to claim 15, wherein said request for invitation is communicated via a peer-to-peer communication mechanism, particularly via a peer-to-peer messaging mechanism.

17. (Currently Amended) A method Method according to claim 9, wherein said mobile terminal and/or said at least one other mobile terminal authenticate at said relay entity.

18. (Currently Amended) A method Method according to claim 9, wherein said mobile terminal and said at least one other mobile terminal communicate over data packet switched services for communicating said data.

19. (Currently Amended) A method Method according to claim 9, wherein said mobile terminal and said at least one other mobile terminal communicate via a protocol out of group of protocols comprising at least transmission control protocol (TCP) and user datagram protocol (UDP).

20. (Canceled)

21. (Canceled)

22. (Currently Amended) ~~Computer program product for executing a method for enabling quasi peer to peer connectivity between at least two mobile terminals in cellular communication networks, comprising program code sections stored on a machine-readable medium for carrying out the method of claim 1, when said program product is run on a computer, a terminal, a network device, a mobile terminal, or a mobile communication enabled terminal~~ A non-transitory computer-readable storage medium carrying one or more sequences of one or more instructions which, when executed by one or more processors, cause an apparatus to at least perform the following steps:

receive data from one mobile terminal that is selected out of a set of mobile terminals

participating in a quasi peer-to-peer data communication over a cellular communication network;

cause, at least in part, a retrieving of information about destination mobile terminals, wherein

said destination mobile terminals are mobile terminals of said set of mobile terminals with the exception of said selected mobile terminal; and

cause, at least in part, a transmission of said received data to said destination mobile terminals in accordance with said information about said destination mobile terminals.

23. (Canceled)

24. (Currently Amended) ~~Relay entity for enabling quasi peer to peer connectivity between mobile terminals in cellular communication networks, comprising:~~ An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs,

the at least one memory and the computer program code configured to, with the at least one

processor, cause the apparatus to perform at least the following,

~~a network interface for receiving receive requests and data associated with a quasi peer-to-peer communication between mobile terminals in a cellular communication network and for transmitting cause, at least in part, a transmission of responses and said data associated with said quasi peer-to-peer communication;~~

~~a protocol handler module for handling facilitate a processing of a requests received from said mobile terminals, wherein said requests comprises comprise at least requests for initiating a relay session, and requests for signing-up a mobile terminal to said relay session; and~~

~~a redirector module responsible to transmit for handling cause, at least in part, a transmission of said data associated with said quasi peer-to-peer communication on the basis of a relay session associated with a quasi peer-to-peer communication; wherein said data received from one mobile terminal are transmitted to all remaining ones of said mobile terminals with exception of said one mobile terminal.~~

25. (Currently Amended) An apparatus of Relay entity according to claim 24, wherein ~~said protocol handler module is further adapted for parsing the apparatus is further caused, at least in part, to parse said requests and configuring configure said relay session accordingly.~~

26. (Currently Amended) An apparatus of Relay entity according to claim 24, further comprising a relay session database which is adapted to wherein the apparatus is further caused, at least in part, to:

store and provide information about said relay session.

27. (Currently Amended) ~~Mobile terminal enabled for quasi peer to peer connectivity in a cellular communication network with at least one other mobile terminal, comprising:~~ An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs,

the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following,

~~a cellular communication interface for transmitting~~ cause, at least in part, a transmission

of requests and data to be communicated for quasi peer-to-peer connectivity in a cellular communication network to said at least one other mobile terminal by

transmitting said data to a relay entity and ~~for receiving~~ receive data originating from said at least one other mobile terminal by receiving said data from said relay entity,

wherein said requests ~~comprises~~ comprise at least requests for initiating a relay session, requests for signing-up a mobile terminal to said relay session, wherein said data are associated with a quasi peer-to-peer communication between said mobile terminal and said at least one other mobile terminal; and

~~peer to peer communication module mediating between said cellular communication interface and at least one application operable on said mobile terminal, wherein said peer to peer communication module is adapted to generate and cause, at least in part,~~

a transmission of transmit requests to [[the]] said relay entity, to supply said data provided by said at least one application to be transmitted to said one other mobile terminal, ~~to said cellular communication interface~~; and
~~to~~ supply said data originating from said at least one other mobile terminal and ~~provided~~ by ~~said communication interface~~ to said at least one application.

28. (Currently Amended) An apparatus of claim 27, wherein the apparatus is further caused, at least in part, to: ~~Mobile terminal according to claim 27, further comprising a dispatcher module for~~

parsing parse messages received via a peer-to-peer communication mechanism to determine whether said message is a request for invitation; and
~~for supplying supply~~ parsing results to said at least one application to enable said at least one application to employ said quasi peer-to-peer communication.

29. (Currently Amended) An apparatus of claim 28, wherein the apparatus is further caused, at least in part, to: ~~Mobile terminal according to claim 28, further comprising a dispatcher database for~~

registering register applications operable on said ~~mobile terminal apparatus~~ on the basis of application identifiers; wherein said application identifiers [[is]] are employed to identify said at least one application, which is addressed by said request for invitation.

30. (Canceled)

31. (Currently Amended) A method Method according to claim 3, wherein each of said mobile terminals of said set of mobile terminals with the exception of said initiating terminal are joining to said relay session to participate in said quasi peer-to-peer communication.

32. (Currently Amended) A method Method according to claim 13, further comprising causing, at least in part, an inviting of said at least one other mobile terminal to participate in said quasi peer-to-peer data communication by transmitting a request for invitation to said at least one other mobile terminal such that said at least one other mobile terminal is enabled to join to said relay session, wherein said request for invitation comprises at least said session identifier that is associated with said relay session.

33. (Currently Amended) A method Method according to claim 32, further comprising receiving a request for invitation from said at least one other mobile terminal such that said mobile terminal is enabled to join to said relay session, wherein said request for invitation comprises at least said session identifier that is associated with said relay session.

34. (Currently Amended) ~~Computer program product for executing a method for enabling quasi peer to peer connectivity between at least two mobile terminals in cellular communication networks, comprising program code sections stored on a machine readable medium for carrying out the method of claim 9, when said program product is run on a computer, a terminal, a network device, a mobile terminal, or a mobile communication enabled terminal~~ A non-transitory computer-readable storage medium carrying one or more sequences of one or more instructions which, when executed by one or more processors, cause an apparatus to at least perform the following steps:

cause, at least in part, a transmission of data from at least one mobile terminal to at least one other mobile terminal for quasi peer-to-peer connectivity in a cellular communication network by transmitting said data to a relay entity; and receiving data originating from said at least one other mobile terminal by receiving said data from said relay entity.

35. (Canceled)